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ABSTRACT

The link between time and learning is one of the most consistent findings in educational research. This handbook describes a process for developing effective use of instructional time through the identification of important decision-making criteria and the use of those criteria to create a school schedule. The handbook describes an 11-step process, the Criteria-Driven Change model (CDC), for developing an appropriate school schedule. The first part discusses the importance of time management and the complexities of the change process. The second part describes strategies for developing, implementing, and evaluating the schedule. The 11 steps include: (1) define the problem; (2) form the committee; (3) set the purpose; (4) learn together; (5) collect data; (6) develop criteria; (7) visit sites; (8) synthesize; (9) create the plan/schedule; (10) implement and support the plan/schedule; and (11) evaluate the plan/schedule using the criteria. Finally, continued learning is crucial to maintaining the program. One figure is included. (Contains 14 references.) (LME)

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Linking the Scheduling of School Time

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Rethinking the Scheduling of School Time

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Introduction

This fastback describes a process for developing effective use of instructional time through the identification of important decision-making criteria and the use of these criteria to create a school schedule.

It is important that readers understand our basic orientation. We focus on how the use of time affects students and teachers. Too often, school leaders adopt new schedules in an effort to improve student learning without fully considering the relation of schedules to instructional priorities. Schedules should meet student needs and reflect the beliefs of the professionals and parents involved. We call these needs and beliefs *criteria*. School schedules should be changed only after educators have closely examined the use of time in relation to their instructional priorities.

Our purpose is to describe an information processing model that can be used at any site to develop an appropriate school schedule. This Criteria-Driven Change model (CDC) has been developed through actual practice, as schedules and their effect on learning and teaching have been examined. The model relies on changing the way that school leaders process change. It

recognizes that effective change is brought about as people learn and then integrate that learning into improving their environment.

In the following sections, we outline the CDC model as a step-by-step procedure so that school leaders can replicate the process to meet the needs of their individual sites. The model's application is neither site- nor educational level-specific. Although the CDC model is simple, implementing the resulting changes can be complex, because those changes will affect individuals and their ideas, programs, and budgets. Therefore, we also provide guideposts along the way to change.

Time and Learning

Why examine time management and school schedules? Educators at all levels have begun recently to focus more acutely on the question, "How can we use time effectively in schools?" The issue is current in the professional literature and in discussions at gatherings of educators.

Some of the driving forces behind this question include educators' desires to:

- Expand school roles to include community and social components.
- Expand curricula in response to the information explosion.
- Address the needs of dramatically changing student populations.
- Restructure to meet new demands.
- "Create" time for required change.
- Facilitate teachers' professional development.
- Better understand effective learning and teaching principles.

Importance of Time Management

The link between time and learning is one of the most consistent findings in education research (Walberg

1990). Wise allocation and productive use of time increases the chance that greater student learning will occur. When class changes are reduced, academic learning time is increased, and classroom management is improved, then students learn more.

Scheduling dictates how much time is allocated to each subject and how much flexibility exists for differences in students, teaching, and content. The schedule controls the school, and schedules drive the curriculum. Until students and learning become the focus of the school, changes in class length and frequency are merely cosmetic (English 1993).

Scheduling also dictates how teachers use time. Teachers need sufficient time for professional development, planning, and preparation of lessons. They need time to deliver instruction effectively. Teachers must have professional development opportunities that are ongoing and built into the existing school year and school day (Anderson 1994). Teachers need time to plan and prepare for innovations and time to implement them (Donahoe 1993). Team teaching, curricular integration, and cooperative decision-making require time for groups of teachers to work together.

Teachers need time to develop techniques that directly involve students in their learning (Steinberg 1993). The design and delivery of instruction changes as content changes, and so different configurations of learning time should be available. Teachers often are asked to modify instructional design and delivery but are not given the flexibility of scheduling the instructional period to accommodate such changes.

These and related concerns have given rise to an increased focus on time and scheduling issues. For example, the National Education Commission on Time and Learning, established in 1991, studied the relationship between educational time and learning in U.S. schools. Their final report, *Prisoners of Time* (1994, p. 29), contains eight recommendations:

1. Reinvent schools around learning, not time.
2. Fix the design flaw. Use time in new and better ways.
3. Establish an academic day.
4. Keep schools open longer to meet the needs of children and communities.
5. Give teachers the time they need.
6. Invest in technology.
7. Develop local action plans to transform schools.
8. Share the responsibility. Finger pointing and evasion must end.

In 1994 the Far West Laboratory identified time as a focus and sponsored a symposium titled, "Rethinking Time: A Conversation on Systemic Reform." Their recent publication, *Stop the Clock: Ending the Tyranny of Time in Education* (Aronson 1995, pp. 14-29), addresses the following questions about time and learning:

- What are some strategies for restructuring educational time to increase or enhance time for learning?
- How can educational time be structured so that all students reach high standards?
- How can districts and schools support teachers in expanded roles that require additional time?

- How can districts and schools be encouraged to restructure educational time to increase the amount of time for learning?
- What are the costs of increasing educational time?

All of this interest points to a need to focus on how we can change our thinking about time and learning in order to deal with the demands of a world that will require a different sort of education than was available in the past.

Complexities of Change

Change in public schools is complex and requires a thorough understanding of the elements that will be affected by the change. Often educators fail to anticipate all the elements associated with the change process. Fullan (1993) challenges education policy makers and school leaders to consider all the forces that figure in the solution and that need to be influenced to produce productive change.

The process of rethinking the school day requires an examination of many factors, such as curriculum, extra-curricular programs, staffing, board policies, and district and school goals (Perreault and Isaacson 1996). The process must involve representatives from all of the affected groups. And, certainly, resistance to change must be anticipated. A schedule change can be of such significance that it will be accompanied by uncertainty, frustration, and stress. Thus for the change to be effective, all perspectives must be allowed, encouraged, considered, and evaluated. Working respectfully with all stakeholders in the education community helps to cre-

ate a climate that encourages exploration of new and different ideas.

Following are several other important concepts associated with change that are mentioned by a variety of researchers:

- Change is a highly personal experience (Fullan 1993).
- All participants affected by change must have the opportunity to work through the change experience (Fullan 1993).
- Any change in school structure should first address the services provided to students largely through the school's curriculum and instruction, and then address changes in the structure, policies, and norms that either support or detract from the services provided directly to students (Leithwood and Aitken 1995).
- Uncertainty is the prime cause of change-related stress (Ashford 1988).
- The change process is uncontrollably complex and unknown (Stacey 1992).
- Any change should not jeopardize existing successful school practices (Hallinan 1995).
- The success of change depends on whether it promises to benefit all students (Hallinan 1995).

Recognizing the complexities of change and that most successful change is brought about slowly, even in optimal conditions, reaffirms the difficulty of bringing about significant change in school practices and schedules.

Change is most successful when it reflects the genuine needs of a school community. The old bureaucratic, top-down approach to change often does not communicate to the school community that their needs are being addressed. A bottom-up approach of site-based management has been tried and has met with mixed success. Fullan (1993) suggests that a combination of the two offers greater promise.

In our work we responded to the preceding questions and prompts by using the Criteria-Driven Change model to help each school to focus on the components of learning and to create schedules that responded to their criteria. The CDC model provides a process for developing schedule solutions while meeting the unique needs of each school, rather than adopting an existing schedule.

The Criteria-Driven Change Model

Change seldom occurs without forces being exerted. These forces can be external, internal, or a combination and need to be identified to understand the purpose behind the change. The driving force behind our examination of district secondary school schedules was parent and staff frustration with schedules that lacked the flexibility to provide options or elective choices for students. The challenge set before us was to bring the secondary schools together to develop a scheduling model that met the needs of students, faculty, parents, and the administration.

The facilitator who led the schedule examination process was guided by findings in the change literature, personal experience with change, and her expertise as a teacher in public schools and higher education settings. She led the committee through various activities from which the following change model evolved (Winn, Menlove, and Zsiray 1997).

Overview

The Criteria-Driven Change (CDC) model focuses on the importance of establishing criteria to drive the cre-

ation, implementation, and evaluation process. This change model is different from others in the professional literature in that decision criteria are identified so that change then evolves from those criteria.

The steps we followed to achieve our goal were as follows:

- Step 1: Defining the Problem
- Step 2: Forming the Committee
- Step 3: Setting the Purpose
- Step 4: Learning Together
- Step 5: Collecting Data
- Step 6: Developing Criteria
- Step 7: Visiting Sites
- Step 8: Synthesizing
- Step 9: Creating the Plan/Schedule
- Step 10: Implementing and Supporting the
Plan/Schedule
- Step 11: Evaluating the Plan/Schedule Using the
Criteria

These 11 steps identify the process and create a thinking environment wherein all concerned with the resolution of a problem can work together to identify and implement a solution that makes sense for their specific environment.

Beginning the Process

Step 1: Defining the Problem. Awareness of the problem can come about in a variety of ways. In our situation, awareness came as school board members and the su-

perintendent received numerous complaints from the community about the local secondary school schedules. Administrators agreed that there were problems, as they had heard similar concerns from educators trying to accommodate performance-based learning, open entry/open exit options, integrated interdisciplinary courses, team instruction, community-based learning, and other practices. The administrators agreed that change was needed. The time was right to examine the secondary schedule.

Step 2: Forming the Committee. Stakeholder representation is a critical component of any change effort (Murphy 1991). To ensure that all constituents had input into the process, a committee was formed consisting of members representing each school faculty, parents, students, counselors, and administrators. Parent and student representation proved critical to the success of the process. Committee meetings were scheduled at neutral sites, outside the affected schools. A professor from the local university served as a facilitator. Her role was to blaze an unbiased path through the maze of information, concerns, emotions, territory protection, lack of trust, past experiences, and so on. She directly facilitated committee efforts in developing a schedule appropriate to the needs of students and faculty alike.

Step 3: Setting the Purpose. The committee meeting began on a positive note, with all of us believing that we shared some common ground. But late into the first meeting, when the purposes and proposed procedures were shared and discussed, feelings of manipulation,

skepticism, concern, and distrust regarding our task were voiced by several committee members. Many openly expressed a lack of belief that their recommendations would be considered. The committee needed reassurance from the superintendent that the process was genuine, that everyone would be listened to, and that the resulting recommendations would be taken seriously.

We also needed to hear and understand the board of education's expectations and the superintendent's expectations in order to develop a clear idea of what would be acceptable to them.

The superintendent attended the next meeting and shared his reasons for forming the committee, emphasizing that we were to "search and discover." He reiterated that he would present the committee's recommendations to the school board and would support the recommendations as long as they were defensible. He extended an "invitation for innovation" and stated his criteria:

- To improve the elective course options for students.
- To provide teachers with equitable amounts of preparation time.
- To ensure that instructional time was productively used.

These criteria were discussed but put aside, as the committee wanted to be truly free to pursue their journey of "search and discover." "To develop a schedule that will educate all students well" became our guiding principle and a reference point in all discussions and decisions.

Learning Together

Step 4: Learning Together. To find a common starting point, each committee member was given a packet of readings that provided information on current practices and research articles on innovative scheduling (for example, Canady and Rettig 1993; Carroll 1990; Darling-Hammond 1993; Sizer 1986; Watts and Castle 1993). Two questions we asked were: 1) What does the literature/research say? and 2) What are others doing that is innovative and effective?

Concepts presented in the identified research were discussed, and the components that appeared promising were "held" for future reference. The purpose was to derive key concepts from each of the new "reform-based" scheduling models in order to begin constructing our own version of a workable solution to the use of time.

At this point, we looked at the good points of the existing schedules, as well as at the troublesome areas. This became a difficult and uncomfortable process as we closely examined our own practices. Several entire sessions were dedicated to sharing and venting emotions. We needed an open forum for discussion and an opportunity to publicly share frustrations and to examine successes. A considerable amount of baggage had to be opened, examined, and dealt with before we could look objectively at the use of time.

Through this dialogue we began to develop a sense of collaboration and unity. Some committee members held the belief that if we were thinking of changing current practice, then what we were doing must be flawed.

It took extensive discussion to reduce these concerns and to begin to convince the participants that we were engaged in the process of building a *better* schedule to benefit our students, but these concerns were never entirely eliminated.

During this time we also began creating "best practice" schedules by using ideas from the literature. This line of thinking kept the committee constantly processing and asking, "What if we did this?" or "What if we did that?" A discussion always ensued regarding the pros and cons of each new model. This activity increased the flexibility of our thinking, as we viewed each new idea in the framework of how it would look in a real schedule.

Step 5: Collecting Data. From the beginning we extended the discussion to the entire faculty and collected data from them.

We conducted informal inventories at the schools to determine teacher attitudes toward current schedules, to identify specific problems with the schedules, and to discover if the schedule did, in fact, limit student choices. We also conducted parent and student inventories, asking them the same questions. Survey results were shared at the schools and with the committee. This process served two purposes. First, we learned how educators, parents, and students really felt about the existing schedule. Second, they learned more about the process in which we were involved.

This intensive learning and discussion period lasted about six months, and member viewpoints were altered. Parents who came to the committee believing that

students needed more options began to voice the idea that students could and should learn to make wise decisions. Teachers who were determined to preserve the current schedule at any cost began to see options that, if added to the existing schedule, would improve learning for all students. Some committee members ceased attending the meetings.

Although time was a factor and we needed to move quickly, time also was allotted for a thorough discussion. Members had the opportunity to express or explore new issues. It was hard to strike a balance between adhering to the timeline and providing opportunities for everyone to share their ideas. We found that even as we discussed the scheduling of time, time also played a major role in our process. However, both the superintendent and the school board patiently waited for our recommendations.

Step 6: Developing Criteria. What important ideas had we learned to this point? What concepts would help create a schedule to facilitate students' learning? A lengthy list of criteria was generated, discussed, then prioritized by the committee. The committee narrowed the list and agreed on the final set of criteria that then became our measuring stick for analyzing innovative scheduling models. We had collectively identified the criteria that our "ideal" schedule should contain and had a rationale to support each component, saying why it was critical and how it would improve the learning environment.

Following are the five criteria headings that organized our standards for creating and examining proposed schedules:

Flexibility

- Provide opportunities for variable length classes based on student needs and class content.
- Accommodate variable enrollments.
- Allow flexible entry and exit of students.
- Facilitate interdisciplinary integration of classes.
- Allow teachers to block periods of time for interdisciplinary study.

Professional Development

- Build in opportunities for teachers to learn and collaborate during regular and extended school hours.

Student Remediation/Enrichment

- Schedule sessions during the day for students to receive help and remediation in class content and assignments.
- Extend student exploration into multiple areas.

Advisory Period

- Provide students a "home" base that follows them throughout their high school years.
- Develop Student Education and Occupation Plans (SEOP) designed to give students and parents the opportunity to meet with teachers and counselors to build an appropriate schedule for each student.

Service Component

- Link students to the community and promote a sense of belonging.
- Extend learning into the community by integrating community members into the learning environment.

Requirements Set by District

- Meet minimum state instructional hour guidelines.
- Operate within current school district budget.
- Provide appropriate preparation periods for teachers.
- Allow students options for class selection.
- Fit with current school/district curriculum or propose changes to the school board.

These general criteria were developed after a lengthy learning process and emerged because the committee believed that each standard, or criterion, would lead to enhanced student learning. The analysis and change process was to be similar for all proposed schedules; however, the criteria also could vary based on the specific needs of each site.

Step 7: Visiting Sites. It is one thing to read about innovative practices and quite another to actually visit schools and talk to faculties and students about their experiences. We identified schools where we could observe components of innovative scheduling that matched our criteria. For example, one high school provided a period for integrated staff development within the regular schedule, another had a student service component, and yet another used a four-period flexible AB block model.

The committee developed questions to standardize the information collected during the site visits. Following are questions that were used to focus the committee's investigation.

Schedule Configuration

- Why was this site selected and why is the schedule innovative?
- What rationale supports scheduling of time and its use?
- What are the schedule components?
- How was the schedule determined — district-mandated, site-created, or community- or board-initiated?
- How long has the schedule been in place?
- How was the transition to the current schedule made?
- Did unique needs or demographics drive the schedule?
- How did the change affect lunch schedules, assembly schedules, and extracurricular programs, AP classes, athletic skills classes, distance learning classes, and so on.

Students

- What is the effect of the new schedule on students?
- Is there evidence of improvement in such areas as student learning, attendance, attitudes, discipline, etc.?
- Does the schedule accommodate a variety of student electives? How are graduation requirements met? What about course challenges, course waivers, credit for outside-of-school experiences, open entry and exit options?
- Does the schedule accommodate varied rates of student learning?

- Does it provide enrichment opportunities for accelerated students and remediation for students who struggle?
- Do students like the schedule? Why or why not?

Teachers

- What is the effect of the new schedule on teachers?
- Are there changes in teaching strategies incorporating integration, cooperative learning, critical thinking, community-based experiences, etc.?
- How is professional development incorporated into the school week?
- What type of professional development was required to implement the change?
- How did the change affect staffing? Did people transfer in or out?
- How was teacher preparation time affected?
- Do administrators, teachers, and staff like the schedule? Why or why not?

Funding, Facilities, and Transportation

- Does the schedule require additional funding, and how is it funded?
- How did the change affect the use of physical facilities? Were more classrooms needed?
- How was transportation affected by the change? How were problems addressed?

Assessment

- How do parents and community members react to the schedule?
- What type of assessment is used to evaluate the schedule changes? Are data available?

- What concerns or problems highlight the change experience?

This is not a definitive list. Questions will differ as they are aligned to the information being sought.

Small groups visited the selected sites armed with the list of questions. Administrators, faculty, and students were interviewed. Members came back to the full committee and presented organized, informative reports. Information from the site visits altered our direction. Some schedule components were discarded, while others became more important.

Step 8: Synthesizing. It is necessary to stop periodically and to reflect on what has been learned. This may be a recursive step that happens intuitively throughout the process, but at some point the entire committee needs to synthesize all that has been learned. Following are key points that outline what we had learned about the use of time and the process of change.

Process

- The timeline and the process need to be flexible.
- Data should drive the process to enable the team to build a schedule that is responsive to the identified needs.
- Development of the decision criteria about the scheduling of time during the school day should come after thoughtful learning, from the literature, from others, and from personal experiences. Criteria will vary depending on goals and will drive the discovery process.

- What currently is working well within the present scheduling system should be maintained if at all possible.

Committee Structure

- Balance in committee representation between teachers, parents, administrators, students, school board members, and community members is required.
- The board of education should be involved early in the process and kept informed on a regular basis.
- Individual committee member roles and responsibilities, including leadership (facilitation) of the committee, need to be defined.
- Committee members need to communicate about the process with their respective groups.
- The role of facilitator needs to be true facilitation with no coercion from external power sources.

Site Visits

- Field trips to other school sites to see schedules in action and to talk with staff and students at the school sites will provide examples of and information about viable schedules to share with other committee members.
- The total committee will generate questions to be asked during the various site visits.

Change Aspects

- The committee must determine the extent to which site participants can bring about change, in relation to district and board of education policy.

- A climate of trust and a sense that the school can make decisions that will be implemented needs to be created.
- A genuine atmosphere of "search and discover" that encourages creativity is essential. No preconceived outcome should be implied.
- Time must be spent developing trust and excitement among committee members.
- Committee meetings should include regular reviews and updates by members as they share what they have learned to that point.

The above points summarize what we were learning as we moved to look at actual schedule components.

Creating the Schedule

At this point the concern is not for functionality. Rather, this is a creative exercise in designing how time will be used in a world where the creators control all realities. All schedule designs are possible at this point. This critical exercise allows the team members to think creatively and without restriction.

Step 9: Creating the Plan/Schedule. The following questions stretch the committee's thinking as they take the identified criteria and begin the process of creating a schedule. Later, these questions will form the basis for creating an actual plan or schedule.

Length and Configuration of the School Year: Initial questions might include:

- Are we committed to the 180-day school year consolidated into nine months?

- Does the configuration of the school year match societal changes from agrarian fields to information superhighways?
- Does employment for secondary students drive a nine-month schedule?
- Do community activities and celebrations, summer camps, training clinics, competitive sports, and youth employment at summer recreation areas drive the nine-month schedule?
- Does the nine-month schedule support current family work patterns?
- Do many children spend summers and holidays unsupervised?

What we know about learning theory causes us to question a three-month recess from academic instruction. This recess necessitates rigorous review sessions at the beginning of every school year. Small breaks throughout the year might enhance learning and reduce the need for review. Students could benefit from involvement in community activities year round. Therefore, follow-up questions might include:

- Would continuous contact with instruction and technology eliminate this need and improve the overall learning environment?
- Could these issues be addressed by a reconfigured school year?
- Would the community support this type of change?
- Does the school year need to be lengthened, or can we use the same number of days in a more productive manner?

The concept that the school is a community learning center opens options for an extended school year and day. Universities already have extended the learning year and day to accommodate a variety of student and facility needs. Some high schools offer classes throughout the day and early evening. Many of these programs combine adult education programs with regular day programs to provide flexibility for students who need to work or who have family responsibilities.

Length and Configuration of the School Day: Following are some basic starter questions:

- Is student learning enhanced if they have shorter academic learning periods spaced over a longer period of time?
- Do longer days enhance student learning?
- What length of the school day is the optimum?
- Are there developmentally appropriate lengths of learning time?
- Do older students learn more effectively in longer school days?
- Does the district transportation schedule drive beginning and ending times?
- Are extended days and late classes conducive to learning?
- Should growing adolescents be sleeping in the early morning hours?
- Would students benefit from a flexible schedule that accommodates morning students and evening students?

The professional literature addresses these important questions. Good arguments exist to support opposing viewpoints, as there is no definitive answer. The answer must be based on educational needs and community expectations. Communities have a "sense" of what their schools should look like. Community expectations and beliefs about the best structure for school year and day schedules need to be respected in the change process. This "sense" can be extended with sound rationales and programs, especially if educators are aware of the expectations and beliefs and work creatively within them.

Adults recognize that they have preferences for learning in either the morning or evening. Does the need to work make it impossible for some students to start school in the early morning? Could a schedule be built that could accommodate a variety of starting times? There are extended-day models in which students arrive at varying times. What are the effects on child care for parents when students leave at varying times? Do younger children benefit from later school starting times?

As day and year schedules are developed, the committee must consider what really drives the configuration of the school day and year. Is it budgets, buildings, transportation, community needs, parent needs, employment opportunities, athletic competition, or learning?

Similarly, there are issues that must be addressed concerning how the "internal" elements of the school day are scheduled. How "blocks" of instructional time are composed and arranged is a critical consideration. Following are a few important questions:

- Is there an ideal length of learning time?
- How do the students' developmental levels relate to the length of learning time?
- What is the interaction between course content, the structure of learning activities, and instructional periods?
- How do various types of teaching methods affect learning time?
- What messages are sent to students about the priority of specific academic subjects based on the amount of time we allocate to each subject?
- Can the length of time of instructional periods vary on a daily/weekly basis without causing chaos?
- What demands on time allocation and structure are created by support programs, such as athletics, lunch periods, media schedules, labs, or special education?
- Are support programs interfering with or interrupting learning and instructional time?
- Are some academic subjects better learned in shorter blocks of time for longer calendar periods? Are some better learned in longer blocks of time in condensed calendar periods?
- Can related content areas be blocked to improve learning? Does this type of blocking allow for natural integration of academic disciplines?

When we focus on an optimum learning experience for students, there are many questions that need to be answered. These may form the keystone of developing the entire schedule. It is easy for a closely focused com-

mittee to lose this perspective about the primary role of the school. Therefore, an examination of the use and scheduling of school time helps to refocus on the primary roles of teaching and learning. Following are several questions to facilitate this refocusing activity.

Characteristics of Effective Instruction

- Does all effective instruction look the same and require the same amount or configuration of time?
- Does the amount of time allocated determine the type of instructional strategies teachers use?
- How does changing the structure of the instructional period affect instructional delivery?

Characteristics of Learners

- What do we know about learning theory that will help us design the schedule to improve the learning environment?
- What do we know about developmental levels of students that will help us design the schedule?
- What are the specific characteristics of the population served and how can reconfiguring the schedule address these characteristics?
- What type of school schedule best prepares students for future activities, such as employment, higher education, and postsecondary vocational training?
- What is the relationship between schedule configuration and student motivation, attendance, and participation?
- Does the schedule provide one-on-one student interaction that assists students in developing self-esteem?

- Are co-curricular opportunities integrated throughout the curricular areas allowing all students access to desired programs?

The schedule should focus on the needs and characteristics of students. Thus the critical questions concern developing a schedule that best matches students' needs and preparing students to face future challenges and opportunities.

The Critical Questions

- As we barter for learning time, are we centered on what really matters in school?
- Do the things that are educationally important drive our decisions?

Using these types of questions will result in change that is based on what is best for students and most effective for teachers.

As the committee asks and answers these questions, it will gradually and deliberately select the criteria to drive the final schedule process. Indeed, as the committee examines the schedule criteria, it may find that minor adjustments to the schedule will accomplish more than a major restructuring. For example, if a high school staff is struggling with time for students to obtain individual help and to make up assignments and tests, then time to help individual students should be an important criterion for developing a new schedule. But simply scheduling an hour-long morning remediation period once a week may meet this need.

We encourage scheduling committees not to limit their creativity. However, schools do not function in a

vacuum, and directives may come from district or school authorities to preserve certain attributes of existing schedules. Following are some of the more common concerns.

- Maintaining certain commonalities among schedules to provide opportunities for districtwide activities;
- Building a schedule that facilitates coordination of distance learning.
- Integrating the state curriculum and graduation requirements.
- Analyzing transportation issues related to the school year and day.

Each committee's list of "realities" will correspond to the needs and constraints of their particular school or district. In focusing on the key criteria for change, it is important to take such realities into consideration.

We now turn to examining schedule components that are linked to specific criteria. Rather than present complete schedules or models for adoption, we will provide segments that might be integrated into a variety of schedules in order to address identified criteria. We hesitate to provide examples, because it is important to develop a schedule that is site-specific. However, we realize that it will be helpful to see examples of schedule-related changes based on specific criteria.

The Resources section lists two sources of schedule models that may be adapted to fit local needs: *Block Scheduling: A Catalyst for Change in High Schools* (Canady and Rettig 1995) and *Retooling the Instructional Day* (NASSP 1994).

In this next step, the committee must look carefully at the criteria that will shape the final plan or schedule. Can criteria-driven change be accommodated in the current schedule? Does the schedule need to be changed? How much change is needed? Is a completely new schedule needed? Or can the current schedule simply be modified? These questions point the way to creating a schedule to meet the identified criteria. The following examples are presented in the same order as the previous criteria questions.

Length and Configuration of the School Year

Examples in this section suggest possible modifications to the traditional school year or extensions of the school year. Many states have a 180-day school year and are driven by high school graduation requirements based on the Carnegie unit. Most traditional schedules at all levels are based on two semesters, each divided into two smaller units, called quarters. As the committee considers modifying the configuration of the school year, it will be important to determine the amount of latitude the committee will have to make changes and still stay within district and state guidelines. Key questions may be: Is the school-year schedule mandated by the district or the state? Will special permission be needed to make the modifications? With whom will the committee need to work? Answering these questions before proceeding should prevent some problems.

Following are several samples that list potential criteria:

Year-Round Schedule. Many extended-year models have been developed. Although these models often are

labeled "year-round," most simply spread the same amount of learning time (180 days) over the calendar year. Thus criteria might include:

- Extend the time in which students are involved in learning over the entire calendar year.
- Reduce time spent reviewing and reteaching.
- Use school and district resources more efficiently.

Reconfiguring the schedule also might be considered. For example, a year-round school still might use four nine-week "quarters" but place a three-week break between each of the quarters.

Other possible models include the Concept 6 Plan, Quinmester, and Quarter Plan (San Diego County Office of Education 1986).

Trimester Schedule. The trimester schedule divides the school year into three 60-day terms. Commonly, the school day is divided into five class periods, which generate five half-credits each term. Classes may or may not be taken in consecutive trimesters. Figure 1 shows a typical trimester schedule. Criteria in this case might include:

- Provide variety in the choices of classes and accumulation of credit.
- Lengthen class periods and decrease the number of classes in day.

A change to a trimester schedule allows students to earn 7.5 credits per year. Class periods are lengthened, and students and teachers have only five class periods

each day, rather than the six or seven periods that are more common in a traditional semester model.

Figure 1. Example of a trimester schedule.

1st Trimester	2nd Trimester	3rd Trimester
Class Length: 66 min	Class Length: 66 min	Class Length: 66 min
English: 5 credit	World History: 5 credit	Biology: 5 credit
Algebra lecture: 5 credit	Word Pro: 5 credit	Physical Ed.: 5 credit
Algebra lab: 5 credit	Biology: 5 credit	World History: 5 credit
Tennis: 5 credit	Drama: 5 credit	English: 5 credit
Band: 5 credit	Band: 5 credit	Band: 5 credit

Extended Optional Summer Schedule. The traditional year extends into the summer, and students have the option of taking additional classes. Possible criteria include:

- Early high school graduation.
- Flexible employment opportunities.
- Efficient use of the buildings.
- Compress the time needed to complete graduation requirements.

Adding a fourth term during the summer to the trimester model (or a third term to the traditional semester model) would permit more continuous use of school buildings and provide more opportunities for students to earn class credits. Alternatively, students might attend any three of the four terms (or two of the three) and could choose to attend the summer term and work during the winter term. For example, students liv-

ing in a region of the country with a ski season might want to take the winter off in order to work in the ski industry. Teaching staff also might be given the flexibility during a school year to teach two, three, or four terms.

Technology, such as distance learning systems, also can extend the school year by bringing summer university concurrent enrollment classes to the high school building for a minimal cost.

True Year-Round High School Schedule. The extended-year model lengthens the school year to 240 days, requiring students to attend 60 additional days, making this scheme truly "year-round." Possible criteria include:

- Early exit from high school to employment.
- Compress the time needed to complete a high school diploma.
- Efficient building use.

Students in this configuration have access to more class options during the school year, expanded remediation, concurrent university enrollment, applied technology education, and integrated project opportunities. The traditional high school experience can be compressed from four to three years. Teachers have the flexibility to continue teaching on a traditional 180-day contract or to expand to a 240-day contract. But, of course, this extended year model requires additional or reconfigured funding.

Good advisement would be required to meet the individual learning and career needs of each high school

student. Partnerships with universities, community colleges, applied technology centers, distance learning programs, and on-the-job training and apprenticeships are important elements of the extended-year opportunity.

Length and Configuration of the School Day

The allocation and configuration of time during the school day can be varied to accommodate schedule-related criteria. Many changes may be simple and do not need to disrupt the entire school schedule. Following are examples that illustrate various reconfigurations of the instructional day.

Preparation Time. In order for teachers to be instructionally innovative and to teach diverse student populations, they need additional time to learn, prepare, and plan. For optimum productivity, such time should be scheduled as part of the regular school day. Teachers need individual time daily to grade papers and prepare lessons, but they also need time to collaborate with other teachers, learn, and innovate. A possible criterion is:

- Time for teacher preparation and collaboration is incorporated as part of the school day.

In addition to the traditional teacher preparation period scheduled each day in secondary schools, a block of time can be created for common planning and staff development. For example, teachers might teach more minutes for four days each week to compensate for an early release of students on one afternoon. The early release time then creates a block of time in the early morning or late afternoon each week when all teachers

are at the school without students. That time can be used for staff development, team planning, department meetings, and faculty work sessions.

Schedule Within a Schedule. Schools can develop specialized schedules within the regular school day to accommodate diverse student populations. A criterion in this case is:

- Specific groups within the school need longer periods of time for integrated learning activities.

A group of teachers and students might be identified to participate in longer class periods where academic subjects are integrated. This schedule would not be interrupted by traditional passing periods. The regular day might be a six-period schedule, whereas the "within" day might be divided into two class periods. Period one, for example, might be integrated English, history, and fine arts. And period two might be integrated science, math, and physical education. Students might meet in small and large groups, participate in extended lab time and field experiences, and stay together the entire year.

Extended Day/Community School. High schools and adult evening school programs can be combined to provide continuous classes throughout the day. Adults and adolescents can attend classes together and structure their schedules to meet individual needs. This type of schedule accommodates a variety of work patterns. Criteria might include:

- Integrate the regular school day and adult/community evening school classes into one seamless day to provide more options for traditional and adult students.
- Use buildings, teachers, equipment, and programs more efficiently.
- Accommodate working high school students who need evening classes and adult students who need classes during the day.

Schools can provide a continuous program with day and evening options so that traditional and adult students can choose various class times. This schedule requires close coordination between the adult education program and the regular school program.

Students also will need good advisement, as well as a technology-based data-management system. For example, Student A, an atypical high-schooler, has a morning job. She comes to school at noon and attends three classes in the afternoon. She returns in the evening for three additional classes. Student B, a returning adult student, works during the afternoon and evening, and so she attends classes in the morning to complete a high school diploma.

Beginning and Ending Times. A school community may determine that varied beginning and ending times will accommodate students best. It may become an intervention to encourage increased attendance at school. In this case, criteria might be:

- Provide options for students to begin and end school.

- Increase attendance at school.
- Accommodate student employment needs.

A high school might provide busing for two morning beginning times and two afternoon ending times. Thus classes might be offered according to student choices and needs.

Block Scheduling. Integrated classes, field-based learning, labs, increased academic content, and innovative instructional practices often create the need for lengthened instructional time. Block scheduling is one solution. With block scheduling, fewer classes would be scheduled for longer periods of time. Criteria in this case might include:

- Create longer blocks of time to accommodate lab experiments, more practice time, and other instructional strategies that demand more time.
- Students have fewer classes to study and prepare for each day.
- Teachers meet fewer students each day and have fewer preparations.

Variable Blocks. Within the block schedule, there may be a need to teach some subjects each day all year long, such as band, orchestra, AP classes, and athletic classes. These classes may not need as many minutes per day during the year, but it is critical that students attend every day. Students who struggle academically may benefit from shorter class periods. Criteria in this case might be:

- Shorter class periods for subjects held on a daily basis.
- Accommodations for students who have difficulty with longer blocks of instructional time.

A block schedule could be modified to include shorter classes that meet daily for the subjects that benefit from continuity. For example, a block schedule might divide one block into two periods that are only 45 minutes long, rather than 90 minutes. In that block, students could take two shorter classes that meet every day, all year long. The divided block can be scheduled at any time during the day.

Characteristics of Effective Instruction

There are many approaches to effective instruction. Some instructional strategies require longer blocks of time to implement. Preparation demands are increased when new strategies are introduced. Effective instruction requires preparation and planning time.

Common Preparation. To accommodate the need for teachers to work together collaboratively as they improve instructional practices, common preparation time must be built into the schedule. Common preparation and planning time benefits teachers and students most when it is regularly scheduled and part of the contract day. A criterion might be:

- Common preparation time is built into the schedule to allow teachers to plan and prepare together.

A school district might hire specialists to teach P.E. and music classes to elementary students in order to

provide 30 minutes of daily preparation time for elementary classroom teachers. Or an elementary school might schedule P.E. and music classes at the same time so that grade-level teachers can plan together.

Professional Development Time. Lifelong learning must be a component of the professional life of every educator. Allowing time during the contract day for this to take place emphasizes its importance. It also communicates to teachers that the school community values them as learners. A criterion might be:

- Professional development time for teachers is built into the school year schedule.

To meet this criterion, one high school reduced the teaching staff by having all teachers teach during daily preparation periods. The saved funds then were used to pay the teachers for 10 months of employment, rather than nine. The extra month was used for professional development and curriculum development.

Integration of Classes. With the burgeoning amount of information that students need to learn, linking content within academic subject areas is becoming essential. Too often, schools segment knowledge; in the real world, knowledge is interconnected. A criterion might be:

- Use the schedule to facilitate integration of academic subjects.

For example, an English class and a U.S. history class are integrated. Historical events and literature are linked. Writing skills are honed as part of history-related

assignments. Preparing for this class requires a common block of planning time. Teachers teaching together will need to plan together. And to teach this class will require a longer block of time during the school day, another effect on the schedule.

Characteristics of Learners

The effective use of time during the school day directly affects student learning. Schedules must be designed and critiqued from this perspective. Educators must ask, How will this schedule improve the learning environment? Students' needs for time to master important concepts vary considerably. Thus variability and flexibility need to be built into the schedule.

Remediation and Enrichment. Students' learning capabilities are a major variable in learning. A flexible schedule provides differing amounts of time for the learners. Criteria to accomplish this flexibility include:

- Students who struggle need time to remediate missed concepts and to receive individual assistance from teachers.
- Accelerated students need time to explore concepts in more depth and to hear a variety of perspectives.

These criteria have been met in various ways. One school has a weekly remediation and enrichment period. Class periods are shortened one day each week to provide one hour for the remediation and enrichment period. Attendance is optional, but students can earn an additional quarter of elective credit for attending all sessions. Some students come to school to attend re-

mediation sessions with individual teachers. Other students have the option of staying home or attending enrichment lectures or classes.

Time-Intensive Learning Experiences. There are times in the high school experience when students need to leave the high school campus for extended learning periods at another training institution or at a work site. A flexible schedule could be constructed to allow teachers to incorporate these types of experiences. In this case the criterion might be:

- Some learning experiences require longer periods of time, such as off-campus or field-based learning.

For example, a two-period day might be developed to provide for long blocks of time during which students attend integrated classes and have the option of leaving the school campus to learn in real-life situations.

Advisory Period. Student education planning is a requirement at all levels of education. Time to conduct these activities can be built into the school day, and planning sessions can be held on a regular basis. The time also can be used to assist students in learning important social skills that are not part of the academic curriculum. Criteria might include:

- Provide a scheduled time to effectively plan and monitor the school experience for each student.
- Teachers can become advisors and meet with small groups of students to supplement the counseling program.

- Students can stay with the same teacher advisor for all the years they attend the school.
- Time can be used for a variety of activities — planning, scheduling classes, discussing important topics not covered in academic classes, talking and playing together, etc.
- The focus is on the relationship between the teacher and the students and monitoring the progress and success of the individual students.

These criteria have been met in various ways. For example, one middle school holds a 15-minute advisory period each day. Students remain with the same assigned teacher for the three middle school years. A high school runs an assembly schedule one day each week so that students can meet with their assigned teacher advisors to review their educational and occupational plans.

Receiving School Credit for Out-of-School Learning Experiences. Many youth today are involved in a myriad of learning experiences outside the school setting. These include music lessons, drama lessons, computer classes, enrichment classes at universities or museums, sports lessons, and team competitions. Students gain important skills and knowledge in these experiences. Academic credit could be given for these experiences. Thus criteria might include:

- Credit toward the high school diploma can be earned outside of the regular school program.
- Students have more choices to take a variety of classes inside the regular school program.

For example, out-of-school community learning experiences might be validated for credit to meet graduation requirements. A student who has studied piano for a number of years might be awarded music credit. A student who works as a software developer at night might be awarded a required technology credit. A student who has spent hours learning at home might be allowed to take a challenge exam for U.S. history credit, rather than take a class. Athletic program participation outside of the school also could be validated for credit.

The examples provided in this section illustrate a variety of options. Once scheduling criteria are identified, planners will be able to develop changes that are aligned specifically with the criteria.

Implementing and Evaluating the Schedule

When the criteria-driven schedule has been created and the implementation process is ready to begin, certain steps should be followed to ensure success.

Step 10: Implementing and Supporting the Plan/Schedule. The success of the change effort hinges on the complete implementation of the new schedule. A clearly defined plan for implementation must focus on details and the roles of all participants. Following are activities that will help to ensure successful implementation.

- Develop a carefully articulated plan prior to implementation. All perspectives and effects of the change must be considered and addressed. All participant roles must be defined clearly, and written plans must be easily understood.

- Make provisions for clear and constant communication regarding the change and for involvement of all participants: administrators, teachers, support staff, parents, and most important, students.
- Make sure that all participants clearly understand the change, the rationale for making the change, the decision criteria, and how the change will affect them.
- Publish timelines listing persons responsible for implementation activities to reassure affected persons.
- Recognize that comfort zones are going to be affected, and so anticipate potential reactions and develop strategies for communicating and dealing with those reactions. Allot time for doing this and consider that reactions will be ongoing.

As individuals move through a change process, they will experience certain stages of concern (Hall and Hord 1987). By being familiar with individuals' concerns about the change, the trauma of the process can be minimized. These concerns must be addressed before individuals can move through the stages and successfully implement the new change.

Support for the process needs to be evident from the beginning and to continue after the initial change period. Support comes in many forms, such as staff development, acknowledgment of differences in both teachers and students, time for teachers to plan and prepare, and administrator facilitation of individual teacher efforts. Support also comes from all the affected school community members as they understand the

need for the change. Teachers are the change agents, and their role cannot be minimized. Success comes as they implement the change activities and are supported and recognized for their efforts. Teachers who feel supported in turn become the champions for the change.

Learning opportunities must be provided for all participants before implementing the change. The training may take various forms. For parents, it may be an article in the parent newsletter and an open parent meeting to address questions. For teachers, it may involve in-depth training on how to implement a specific schedule change. Time and funding must accompany the change effort.

Staff development that supports the schedule change should relate specifically to that change and should be aligned with the identified decision criteria. For example, a criterion might be to have longer blocks of learning time and more instructional flexibility. Thus class periods have been lengthened to meet the criterion. Now teachers need assistance and staff development to use the additional instructional time effectively. Similarly, if integrating subject matter is the criterion, then teachers will need time to learn the most effective methods for developing and presenting the integrated content. They will benefit from planning time with teachers or consultants who already have integrated content.

Staff development time must be part of the schedule. Many elementary schools release students early one day a week so that the faculty can meet together. One high school varied the concept by holding an early morning

staff development session on Friday, with early staff and student release in the afternoon. Instructional time was added to the other days of the week to compensate for early release. The critical component is to build staff development into the schedule every week. It is not optional. Teachers need ongoing learning as much as students do.

Leadership Requirements to Implement and Sustain Change: The "big bang" theory maintains that when all the components were available, they simply fell into place and the universe was created instantaneously. Many people seem to view change with the same optimism. Get all the elements together and, "bang," the change will occur. But change does not work that way. Change leaders must be willing to work hard to see that the change is implemented fully, that decision criteria are adhered to, and that support for change is provided.

Leadership can come from various levels and in a variety of combinations. The superintendent, district office staff, board of education, school administrators, school community members, teachers, parents, and students all can assume leadership roles. Leadership is critical but person independent. It is not important who the leaders are, as long as they are committed to the decision criteria and ensure that the purpose for the change is regularly reviewed and aligned.

However, the leadership role in the change process does not supplant the need for the original committee to continually examine the change and make adjustments as needed. Membership on the committee may

change, but there always should be a method for individuals to share information on the change process and to communicate needs and successes.

Step 11: Evaluating the Plan/Schedule Using the Criteria
Evaluation and monitoring are important components of any change effort. Major change is focused on improving the learning environment, but the first year may be too early to see academic change. Change aspects that may be examined are: What is happening now that was not happening before? Did the change make a difference? Evaluators should look for other indicators that the change effort is having an effect in critical areas. They should not rely on any single measure, but should collect data on as many components as possible from as many sources as feasible. For example, the change in scheduling may be shown by student performance concerns, but other ancillary criteria could be to increase teacher instructional capabilities, to provide decision-making opportunities for teachers, to involve parents at the site, to provide more effective advising for students, and so on. There could be many indications of success. These indicators must be examined to determine if the change is having the desired effect, to agree the indicators is responsible, especially when a school is making a major change in how it goes about the business of educating students (Johnson, 1987).

Evaluation processes are most successful when they are carefully planned and integrated during the implementation phase. Therefore, evaluation activities should not be complicated. Action research is an appropriate

approach for evaluating changes relating to the school schedule. As teachers enter into the schedule change, they should be aware of the evaluation process and have input in identifying the data to be collected. Knowing that evaluation is a part of change will help when data are being collected and analyzed.

Students, staff, parents, administrators, district office staff, and school board members need to be given the evaluation results. All need to see the changes that have occurred and how those changes have made a difference in the school. Nothing is more discouraging than to dedicate time and effort to change and never know what happened once the implementation begins.

The evaluation process also should highlight areas that are not responding to the change effort. This provides opportunities for refining current practices. Often, practices that were adopted because they appeared effective in another school are not effective in their new setting. Regular evaluation prevents a school from continuing an ineffective practice. Otherwise, change efforts should not be abandoned as a reaction to ineffectiveness. Instead, the change efforts should be examined, and adjustments should be made accordingly. The difficulty of making these adjustments should not be minimized, but they will be needed.

It may take three to five years before the change is fully in place and functioning well. When the change becomes part of the culture of the school and the belief system of students, staff, and parents, it no longer is dependent on external forces to keep it in place (Hargreaves and Stiegel 1993).

Two High School Evaluation Models. Following are two examples of how different high schools evaluated criteria-driven changes in their school schedules. The two high schools participated in the CDC process and implemented different schedule change components based on different site-based decision criteria. In each case, after using the new schedule for one year, students, teachers, and parents were asked to evaluate their satisfaction. A one-page, four-question survey was developed to determine attitudes about the schedule and the strengths and weakness of the schedule. A random sample of students and parents at each high school was selected to respond to the survey. All teachers in both high schools were asked to complete the survey; 50% responded.

High School A's schedule provided for academic remediation time for students and staff development time within the existing five-period, trimester day. The evaluation data indicated that students, teachers, and parents were satisfied with the schedule and liked it better than the previous schedule.

In response to the open-ended questions, teachers reported that the remediation period and the length of the class periods were strengths in the schedule; unnecessary interruptions of instructional time (intercom, assemblies) and the need for a sixth period were weaknesses. Parents felt that the major strength of the new schedule was remediation, and the weakness was a lack of an advisory period. Based on these data, modifications and adjustments to the schedule were made.

On the other hand, High School B added an advisory period to the existing five period trimester schedule.

Mixed feelings were expressed by students, parents, and teachers. Many of the respondents took a neutral position, indicating that the schedule was no better or worse than the previous year's schedule.

The conclusion drawn from these data was that the decision criteria were not met and adjustments were required. The committee planned to examine the criteria to try to determine the problem. Did the teachers understand the advisory concept and its implementation? Did they lack training? Were students opposed to the concept and uncooperative? Is it important to continue with the change, or is it better to look again at the decision criteria and to propose other changes?

Using the Evaluation Results. The strength of the CDC model is that it is designed to be recursive. The 11 steps produce a continuous process that can be revisited throughout the change experience. After looking at the evaluation results and listening to stakeholders' concerns and complaints, change leaders need to go back to the 11 steps and create a "short list" of steps to refine the schedule. Future actions will be based on information learned from the evaluation.

For example, a short-list CDC model used to address the needed change in the advisory period for High School B might include the following steps:

Step 1: Defining the Problem. Teachers were not adequately trained before the advisory program was implemented and, as a result, did not know how to structure the time allowed for advising students. The teachers did not receive ongoing training during the year. Advisory

periods often were canceled because of assemblies and other interruptions.

Step 4: Learning Together. More learning about advisory periods and training of teachers occurs. Teachers attend a series of training sessions prior to the beginning of the school year, develop a list of advisory activities, and receive support training and share success experiences during the school year at regularly scheduled faculty meetings.

Step 9: Creating the Plan/Schedule. A new advisory plan is created. The new advisory plan contains two components: Teachers have a curriculum to follow, and the advisory period is held weekly without exception.

Step 10: Implementing and Supporting the Plan/Schedule. The new advisory plan is implemented, and support for teachers is provided at regularly scheduled faculty meetings. Administrators participate as advisors.

Step 11: Evaluating the Plan/Schedule Using the Criteria. At mid-year a survey will be given to students, parents, and teachers to evaluate the effectiveness of the changes to the advisory period. A year-end survey also will be conducted.

Note that throughout this process, the decision criteria have remained constant. The way to meet the decision criteria has been modified based on the evaluation information, but the decision criteria are still the driving force in the modifications.

Continuing the Change

Maintenance and monitoring must be built into any change plan. The need for continued learning for teachers has been stressed, and this is part of the maintenance. In addition, administrators always must keep the change foremost in their thinking and recognize the effort required to bring about the change. As change evolves, new administrative issues will arise, such as:

- How will new teachers be oriented into the existing program?
- How will current teachers receive regular follow-up training?
- Will the budget be in place to provide necessary supplies for new ways of teaching?
- Will time be available for regular evaluations?

Administrators are as involved in the learning process as teachers are. Even though much of the focus of the schedule process is on teacher and student learning, administrative learning cannot be ignored. It is a factor to build into the change plan. The process of aligning what we do in education with our desired criteria is never finished. As long as teachers and administrators continue

learning, they will be involved in implementing new ways of teaching and new models of scheduling.

Finally, there are some key concepts that are critical to successfully using the Criteria-Driven Change model. As we barter for learning time, are we centered on what really matters in school? Do the things that are educationally important drive our decisions? The key concepts are:

- A schedule must be built by aligning needs, criteria, and schedule components.
- Changing how we use time in the school day is driven by what is important to the school community, as summarized in the decision criteria identified in the CDC process.
- Any change in scheduling must be based on its effect on student learning.
- Changing the schedule does not automatically improve instruction.
- Participants in the change process must be willing to learn and to think together.
- All schedules are possible.
- Support begins with implementation and continues on a daily basis.
- Criteria-based evaluation prevents continuing with ineffective change.

The Criteria-Driven Change model can help leaders find successful ways to improve school schedules and to make the most effective use of instructional time.

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Phi Delta Kappa Fastbacks

Two annual series, published each spring and fall, offer fastbacks on a wide range of educational topics. Each fastback is intended to be a focused, authoritative treatment of a topic of current interest to educators and other readers. Several hundred fastbacks have been published since the program began in 1972, many of which are still in print. Among the topics are:

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Community Involvement	Special Education
Computers	Staff Development
Curriculum	Teacher Training
Decision Making	Teaching Methods
Dropout Prevention	Urban Education
Foreign Study	Values
Cultural and Ethical	Vocational Education
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Phi Delta Kappa Educational Foundation

The Phi Delta Kappa Educational Foundation was established on 17 October 1966 with the signing, by Dr. George H. Beavis, of the irrevocable trust agreement creating the Phi Delta Kappa Educational Foundation Trust.

George H. Beavis (1885-1975) entered the education profession after graduating from Warrensburg Missouri State Teachers College in 1906 and the University of Missouri in 1911. He went on to earn an M.A. and a Ph.D. at Columbia University. Dr. Beavis served as assistant superintendent of schools in Maryland and dean of the College of Arts and Sciences and the School of Education at the University of Pittsburgh. In 1929 he was appointed director of instruction for the Ohio State Department of Education. But it was as assistant superintendent for curriculum and instruction in the Cincinnati public schools (1939-46) that he rose to national prominence.

Dr. Beavis' dream for the Educational Foundation was to make it possible for seasoned educators to write and publish the wisdom they had acquired over a lifetime of professional activity. He wanted educators and the general public to better understand (1) the nature of the educative process and (2) the relation of education to human welfare.

The Phi Delta Kappa textbooks were begun in 1972. These publications, along with monographs and books on a wide range of topics related to education, are the realization of that dream.